

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Hiroyuki HIRAIWA

Application No.: U.S. National Stage of PCT/JP00/02639

Filed: December 1, 2000

Docket No.: 108186

For: SILICA GLASS MEMBER, METHOD FOR PRODUCING THE SAME, AND  
PROJECTION ALIGNERS USING THE SAME

INFORMATION DISCLOSURE STATEMENT

Director of the U.S. Patent and Trademark Office  
Washington, D.C. 20231

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. The reference was cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

JAO:TJP/emb

Thomas J. Pardini  
Registration No. 30,411

Date: December 19, 2000

OLIFF & BERRIDGE, PLC  
P.O. Box 19928  
Alexandria, Virginia 22320  
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
--

09/719998

526 Rec'd PCT/PTO 19 DEC 2000  
Sheet 1 of 1Form PTO-1449  
(REV. 8-83)US Dept. of Commerce  
PATENT & TRADEMARK OFFICEATTY DOCKET NO.  
108186APPLICATION NO.  
U.S. National Stage of  
PCT/JP00/02639

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT  
Hiroyuki HIRAIWAFILING DATE  
December 19, 2000

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS
		JP-A-8-107060	04/1996	Japan		

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)


EXAMINER

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/02639

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.<sup>7</sup> C03C3/06, H01L21/027, G03B27/32, C03B20/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int. Cl.<sup>7</sup> C03C3/06, H01L21/027, G03B27/32, C03B20/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2000
Kokai Jitsuyo Shinan Koho	1971-2000	Jitsuyo Shinan Toroku Koho	1996-2000

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO, 98/52879, A1 (HERAEUS QUARZGLAS GMBH), 26 November, 1998 (26.11.98), page 5; lines 11 to 28 & JP, 10-324838, A Par. No. [0011] & EP, 917523, A1	1-15
Y	JP, 9-52722, A (Sumitomo Metal Industries, Ltd.), 25 February, 1997 (25.02.97), Claims; Par. Nos. [0008], [0009] (Family: none)	1-15
Y	JP, 8-107060, A (Nikon Corporation), 23 April, 1996 (23.04.96), Par. Nos. [0025] to [0027] (Family: none)	1-15
Y	EP, 870737, A1 (SHIN-ETU QUARTZ PRODUCTS CO., LTD), 14 October, 1998 (14.10.98), Claims; page 2; lines 20 to 50 & JP, 10-338531, A Claims; Par. No. [0003]	1-15
Y	JP, 8-268726, A (Nikon Corporation),	1-15

☒ Further documents are listed in the continuation of Box C.
 ☐ See parent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search  
18 July, 2000 (18.07.00)Date of mailing of the international search report  
08 August, 2000 (08.08.00)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/02639

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	15 October, 1996 (15.10.96), Par. Nos. [0018] to [0021] (Family: none)  JP, 2000-7349, A (Asahi Glass Co., Ltd.), 11 January, 2000 (11.01.00), Par. No. [0021] (Family: none)	1-15